Applying Advanced Spatial Technology to the
Search & Rescue Operation

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March 11, 2008

Integrating GIS with
Emergency Management

2008 VIRGINIA EMERGENCY
MANAGEMENT CONFERENCE

VEMA
Virginia Emergency Management Association

The Search & Rescue Team in Spotsylvania

- There are a total of 21 team members
- All are VDEM certified.
- The team is made up of:
  - Tactical Trackers - 18
  - Bloodhounds certified - 2
  - Cadaver K-9's certified - 2
  - Unmanned aircraft operator certified - 6
  - Emergency Medical Techs - 1
  - Paramedic - 1
  - All members are CPR & basic first aid certified

The Spotsylvania County
S&R Command Trailer

The Spotsylvania County S&R Command Trailer

Spotsylvania County S&R
The Way it used to be

Original "GIS" System
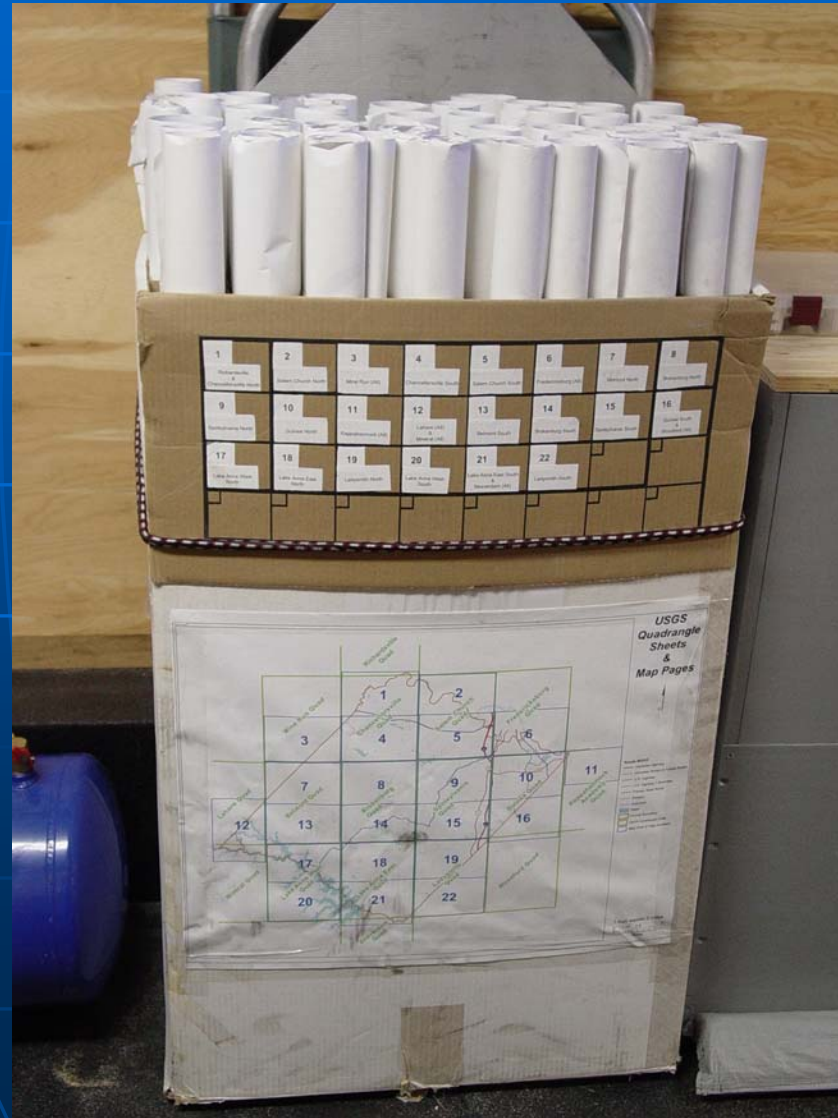• ADC Guide - Road Map
• USGS 7 ½ Minute Quads
• Scotch Tape

Spotsylvania County S&R
Establish an Analogue (Paper) Back-up System

Series of Paper Maps
- Roads
- Contours
- Aerials

Spotsylvania County S&R
Install GIS System
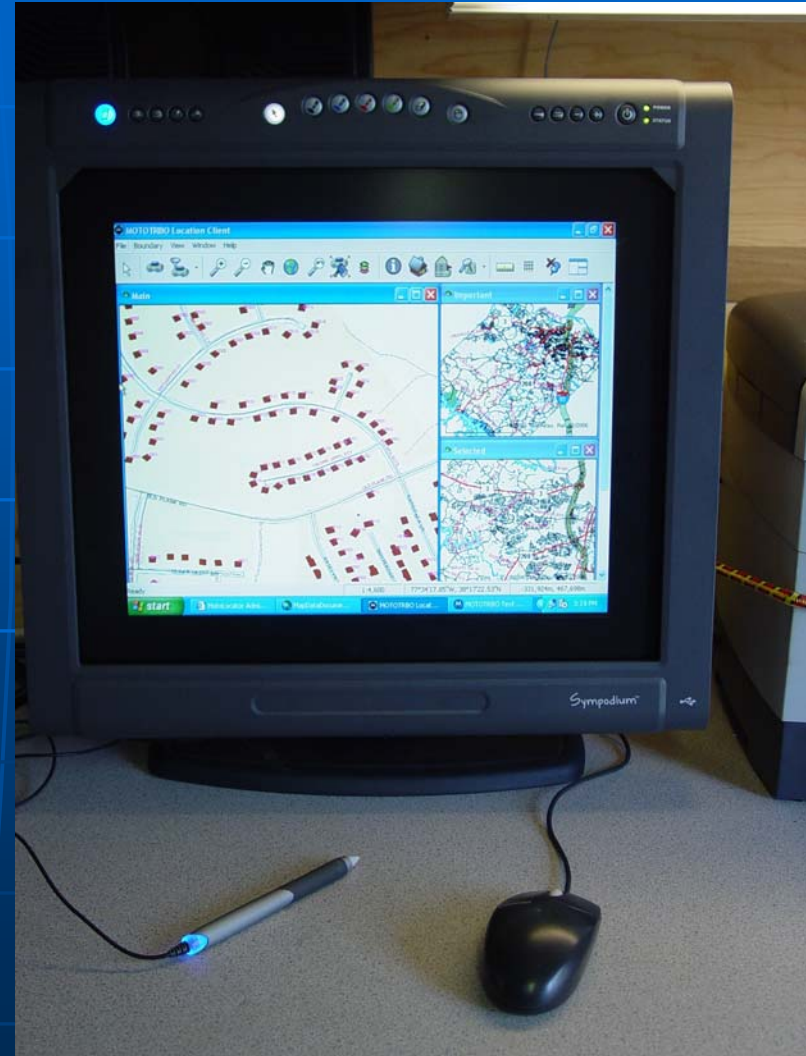
GIS Consist of:
- ArcReader
- Printer
- UPS

Spotsylvania County S&R
Add Search Crew Tracking Capabilities

MotoLocator System
- GPS Equipped Radios
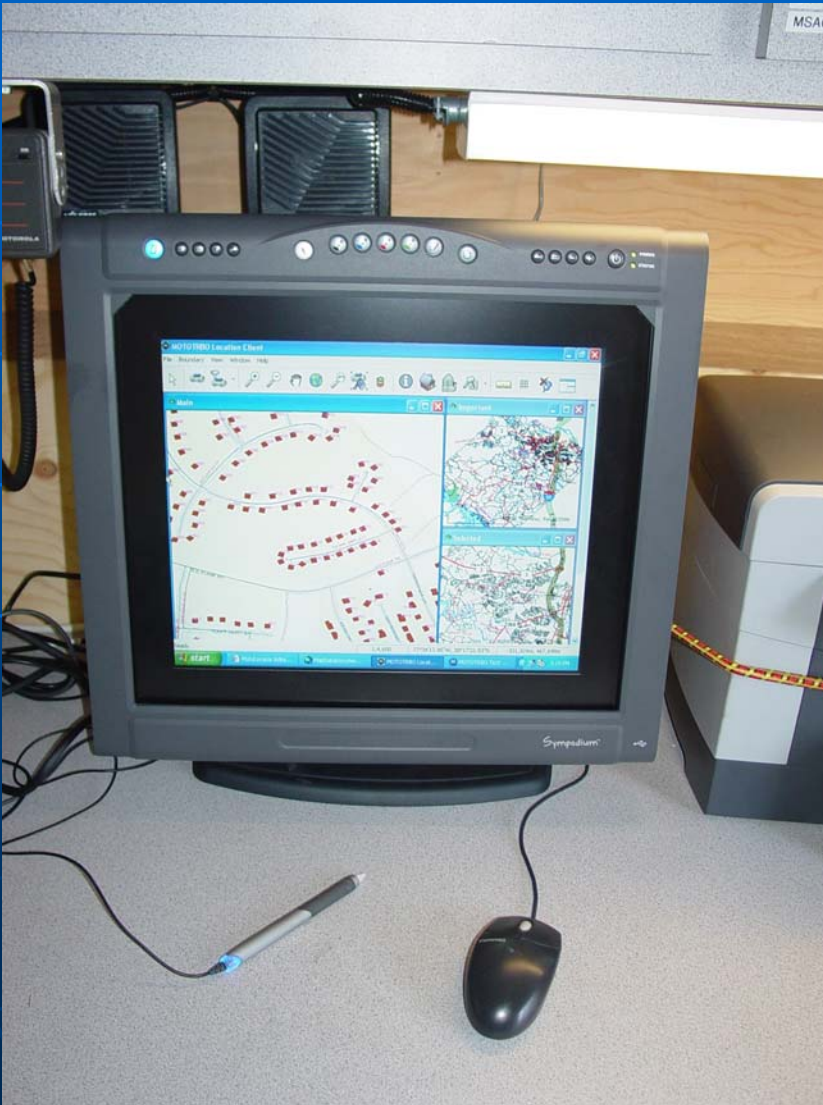- Base Station
- Repeater Station
- Viewing Software

Spotsylvania County S&R
Add Planning & Coordinating Capabilities

SmartBoard Technology:
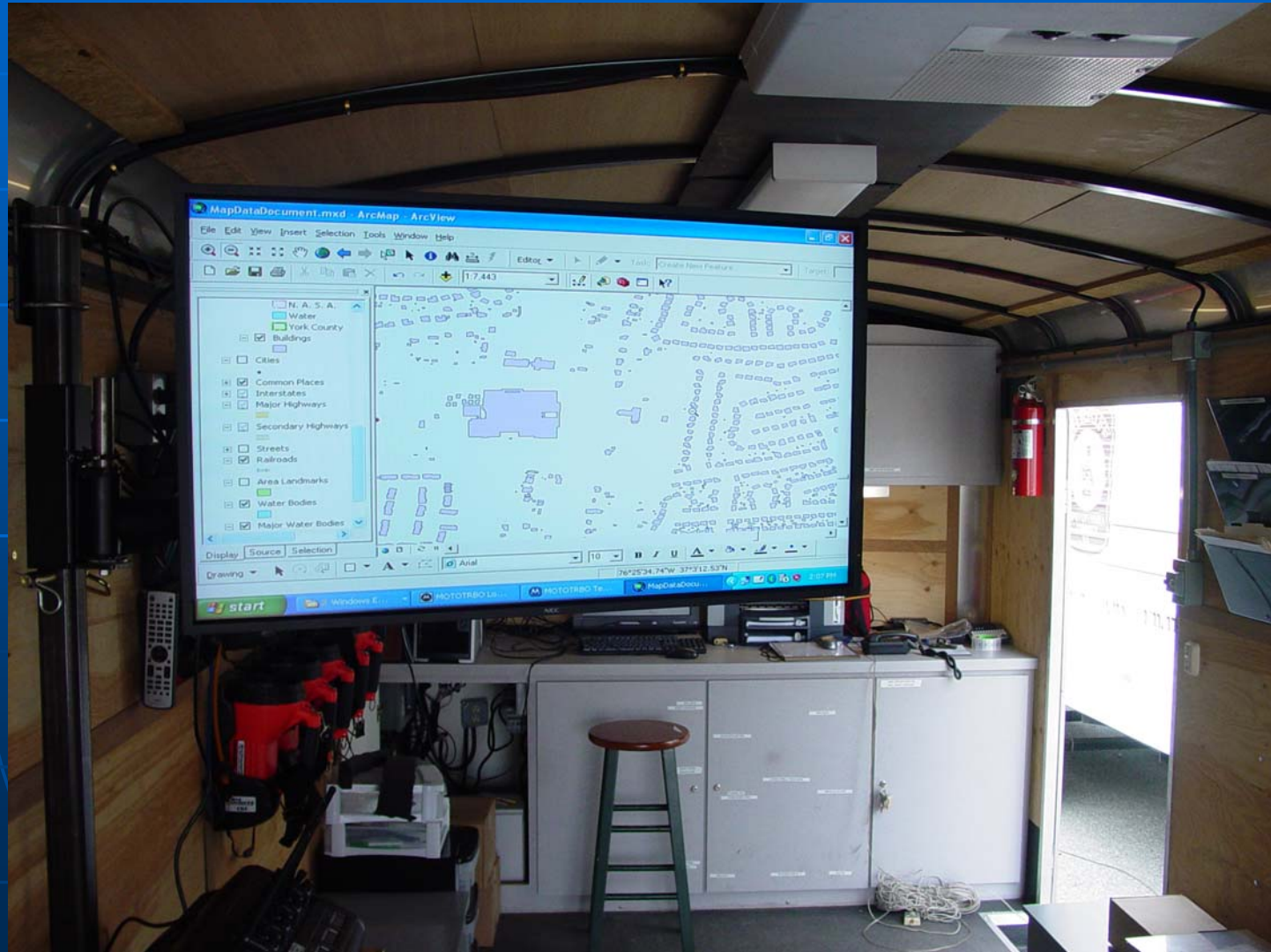- Sympodium
- Slate (Airliner)
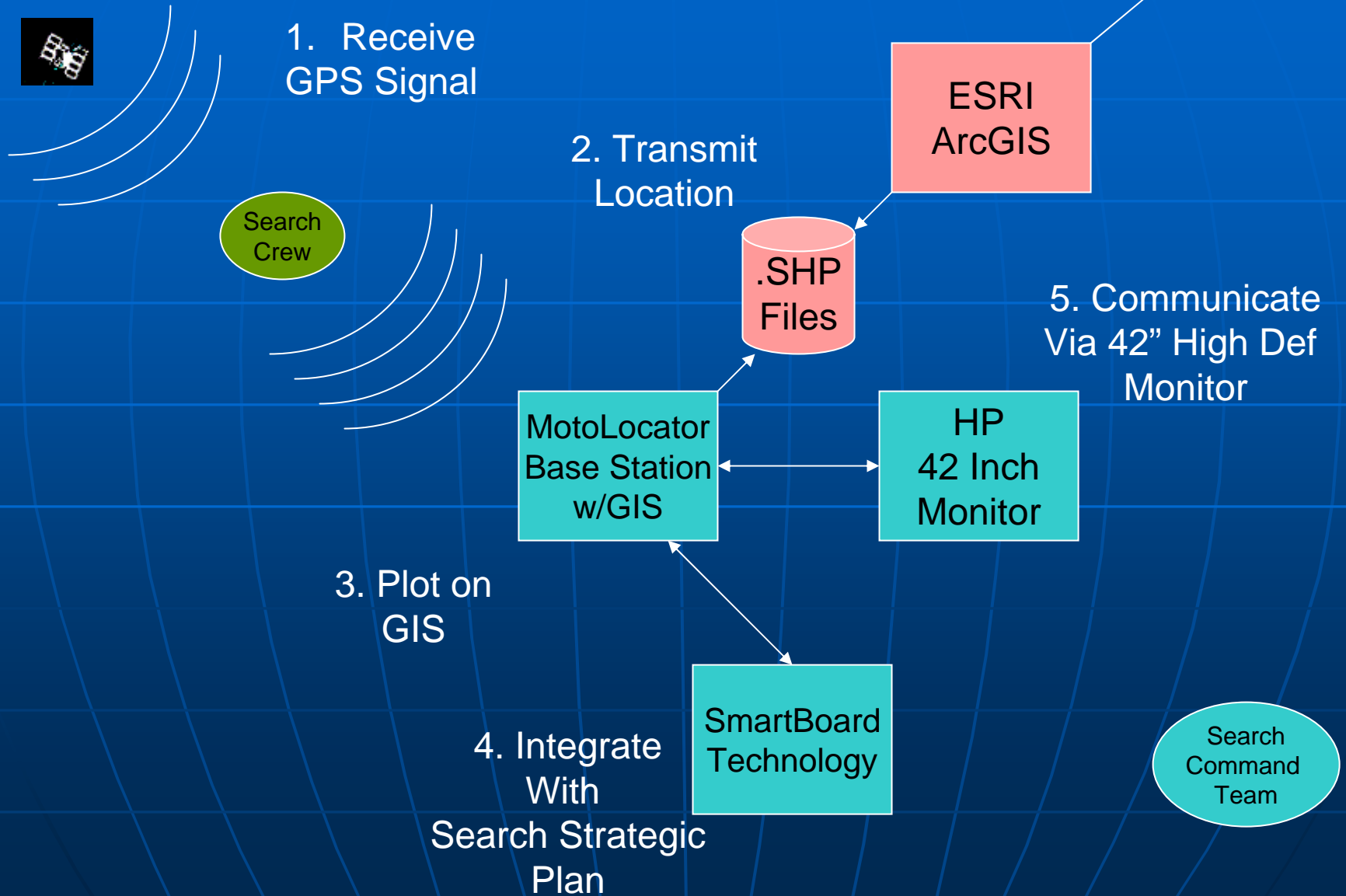- Software

Spotsylvania County S&R
Communicating to the Team With Large Monitor

Monitor Consist of:
- 42 inch Diagonal
- Custom Mount
- Signal Booster

Spotsylvania County S&R Summary of the System

On the Fly Cartographic Products

1. Receive GPS Signal

2. Transmit Location

ESRI ArcGIS

Search Crew

.SHP Files

5. Communicate Via 42" High Def Monitor

MotoLocator Base Station w/GIS

HP 42 Inch Monitor

3. Plot on GIS

4. Integrate With Search Strategic Plan

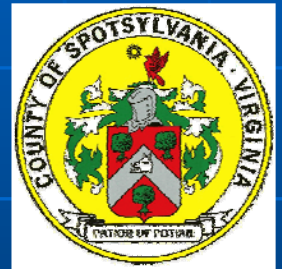SmartBoard Technology

Search Command Team

Benefits of the System

- Assure a Thorough Search
- Improves Search Coordination
- Improves Safety of Searchers
- Enable Convergence on the Victim
- Standalone System Facilitates Mutual Aid
- Archive Cases

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